# BRYAN STEAM

### **Spray Type Boiler Feedwater Deaerators** Capacities 5,000 to 60,000 PPH (145 to 1740 BHP)



15,000 PPH unit shown

The Bryan spray type deaerator is rated for oxygen removal to .005cc/I (7 PPB) and CO<sub>2</sub> to zero measurable across its entire operating range. With its all stainless steel spring loaded spray valve and second stage steam scrubber, the spray type deaerator is a

**Performance Features** 

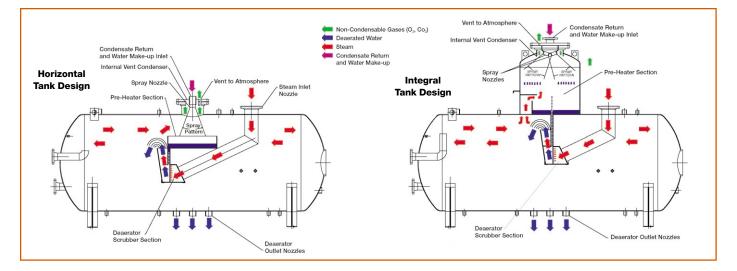
- Oxygen removal to .005 cc/l (7 PPB)
- CO<sub>2</sub> removal to 0% measurable
- Reduce chemical costs
- Reduce boiler and system corrosion
- Improve boiler efficiency
- Pre-heat boiler feedwater
- Quick equipment payback, compared to chemical oxygen removal

#### **Construction Features**

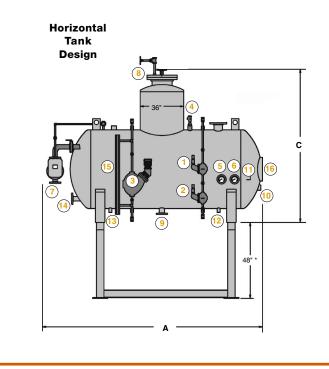
- Constructed to ASME Section VIII, Division I for 50 PSIG
- Easily accessible manway
- Standard 10 minutes deaerated water storage
- Internal vent condenser for minimum steam loss
- Self-adjusting spring-loaded stainless steel spray valve
- Structural steel stand/pump platform
- 2-stage deaeration
- Available as completely packaged unit including pumps and control panel

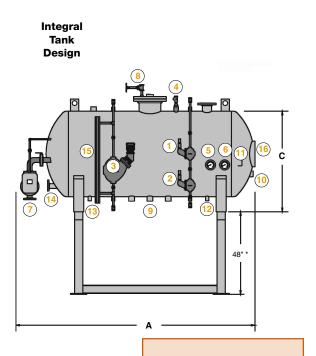
good choice for all deaerator applications.

Units are available with a complete range of boiler feedpumps and control options making them a total deaerator package with minimal amount of field assembly.



## Bryan Spray Type Deaerators — Horizontal and Integral





\*Note: Stand height varies depending upon pump specifications and job conditions. Dimensions are for reference only and may change without notice. Consult factory for certified dimensions.

#### **Specifications**

Model	Capacity			Dimensions in inches (cm)		
	Pounds/hr (kg/h)	Boiler hp (kW)	Storage in gallons (liters)	A Overall length	B Overall width	C* Overall height
Horizontal Tank Design						
DSH-5	5,000 (2,268)	145 (1,422)	200 (757)	124 (315)	36 (91)	52 (132)
DSH-10	10,000 (4,536)	290 (2,844)	200 (757)	124 (315)	36 (91)	52 (132)
DSH-15	15,000 (6,804)	435 (4,267)	300 (1,136)	117 (297)	42 (107)	60 (152)
DSH-20	20,000 (9,072)	580 (5,689)	400 (1,514)	120 (305)	48 (122)	64 (163)
DSH-25	25,000 (11,340)	725 (7,111)	500 (1,893)	137 (348)	48 (122)	64 (163)
DSH-30	30,000 (13,608)	870 (8,533)	600 (2,271)	156 (396)	48 (122)	64 (163)
Integral Tank Design						
DST-35	35,000 (15,876)	1,014 (9,956)	700 (2,650)	143 (363)	48 (122)	104 (264)
DST-40	40,000 (18,144)	1,159 (11,378)	800 (3,028)	156 (396)	48 (122)	104 (264)
DST-45	45,000 (20,412)	1,304 (12,800)	900 (3,407)	141 (358)	54 (137)	110 (279)
DST-50	50,000 (22,680)	1,449 (14,222)	1,000 (3,785)	171 (434)	60 (152)	120 (305)
DST-60	60,000 (27,216)	1,739 (17,067)	1,200 (4,542)	177 (450)	60 (152)	120 (305)

\* Not including the stand.

- 1. High water level control
- Low water level control
  Make-up water control
- 4. Vacuum breaker
- 5. Temperature gauge
- 6. Pressure gauge
- 7. Overflow trap
- 8. Vent
- 9. Pump suction
- 10. Pump bypass
- 11. Chemical port
- 12. Drain
- 13. Sample port
- 14. High temperature condensate return
- 15. Gauge glass
- 16. Manway access opening



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